SIIA Accelerating Innovation in Technology, Data & Media

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March 13, 2019

Mr. Richard E. Neal
Chairman
Ways and Means Committee
House of Representatives
WMdem.submission@mail.house.gov

Dear Chairman Neal:

On behalf of the Software & Information Industry Association (SIIA), I am submitting this written statement in connection with the February 27, 2019 hearing on U.S.-China Trade. SIIA appreciates the opportunity to comment. SIIA is the principal trade association for the software and digital content industry. We provide global services in government relations, business development, corporate education, and intellectual property protection to the leading companies that are setting the pace for the digital age.

SIIA is grateful for the analytical approach taken by the Committee in considering U.S.-China trade policy. There are many trade and investment problems stemming for Chinese practices, laws, and regulations that must be addressed. Our members experience market access challenges in China, explicit or implicit forced technology transfer rules, intellectual property theft, data localization, misuse of competition rules and many other problems. For example, China's Cybersecurity law remains problematic for all foreign invested digital trade companies for many reasons, including the following: the definition of "Important Data" is over-inclusive, encompassing everyday business data such as basic business contact and publicly available information. SIIA therefore concurs with the view that structural problems in the U.S.-China trade relationship must be dealt with. It is crucial for the United States to work with allies and partners (many of whom share U.S. perspectives on China) to forge a strategy to change Chinese behavior.

SIIA does not share the view that tariffs are an appropriate way to change Chinese practices, laws, and regulations. Too often the tariffs harm U.S. companies and consumers. They are, in fact, tax increases. In some instances, they actually undermine U.S. competitiveness. This is why SIIA is a member of Americans for Free Trade (AFT), which has developed information on the harmful effects of the tariffs, including in many economically vulnerable parts of the United States. Therefore, SIIA urges the tariffs be eliminated as soon as possible and that tariffs must be accompanied by a well-functioning product exclusion process. For specific problems with the tariffs for the technology sector, see the accompanying September 6, 2018 letter to USTR on the impacts of tariffs on data centers and the May 11, 2018 SIIA letter to USTR on the negative impact of tariffs for U.S. industries developing Internet of Things solutions.

Sincerely,

Carl Schonander
Senior Vice President for Global Public Policy
Software & Information Industry Association

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September 6, 2018

Mr. Robert E. Lighthizer
United States Trade Representative
Office of the United States Trade Representative
White House

Dear Mr. Ambassador:

The Software & Information Industry Association (SIIA) appreciates the opportunity to submit comments on the U.S. government's proposed tariffs on certain Chinese products, which are contained in Docket No. USTR-2018-0026, otherwise known as "list 3" tariffs. It is certainly true that Chinese trade and commercial practices require sustained attention because there is no doubt that China does not provide for a level playing field for the kinds of technology and information companies that SIIA represents. SIIA therefore supports the Trump Administration's emphasis on changing the paradigm for U.S.-Chinese economic relations.

As a general matter, SIIA opposes tariffs as a means of changing other countries' practices because they are usually not effective, and because they impose costs on U.S. consumers and businesses. They are effectively a tax increase for individuals. This is why SIIA co-signed a March 18, 2018 multi trade association letter[1] to the President and a multi trade association April 11, 2018 letter[2] to the House of Representatives Ways and Means Committee explaining the general rationale for not imposing tariffs. Moreover, SIIA sent a May 11, 2018 letter to you opposing tariffs ("list 2") on smart thermostats, augmented reality components, and components important to building data centers. We noted that these tariffs impose a tax on U.S. consumers and undermines U.S. leadership in the Internet of Things (IOT) sector.[3]

SIIA views on those proposed tariffs were furthermore informed by the immense potential the United States has in developing the Internet of Things (IOT), which we discuss in a White Paper entitled: "Empowering the Internet of Things: Benefits, Solutions, and Recommendations for Policymakers."[4] The paper includes information noting that the United States is the global leader with respect to IOT enabling factors. By 2030, IOT could enable annual 2.3% higher growth in the United States versus 1.3% in China. But this U.S. competitive advantage assumes, in part, seamless supply chains.

"List 3" Tariffs Undermine U.S. Data Center Construction and U.S. Cloud Computing Competitiveness

[1] Multi-Trade Association March 18, 2018 Letter to President Donald J. Trump.
[2] Multi-Trade Association April 11, 2018 Letter to House of Representatives Ways and Means Committee Chairman Kevin Brady and Ranking Member Richard Neal.
[3] SIIA May 11, 2018 Letter to Ambassador Robert E. Lighthizer.
[4] SIIA White Paper: "Empowering the Internet of Things: Benefits, Solutions, and Recommendations for Policymakers," March 17, 2016.

This letter focuses on the proposed tariffs on transmission devices (HTS 8517.62.00) and printed circuit board assemblies (HTS 8473.30.11). Tariffs on these two categories of products will directly increase the cost and difficulty of building data centers in the United States and will raise costs for the small and large U.S. companies that rely upon cloud services to export to global customers.

Cloud computing is a major U.S. strategic economic asset where U.S. dominance is at this time only challenged by Alibaba from China and SAP from Germany. SIIA was early in emphasizing the importance of cloud computing and put out a White Paper on cloud computing with recommendations for policymakers in 2011.[5] The top seven cloud computing services companies in 2018 are Amazon Web Services, Microsoft Azure, IBM, Google Cloud, Alibaba, Salesforce, and Oracle.[6] In 2016, the United States led the world with respect to procurement of cloud computing services at $44 billion, followed by the EU at $14.5 billion, China at $1.2 billion, Brazil at almost $1 billion and the rest of the world at $15.7 billion.[7] There is huge potential for further expansion in the United States and in export markets around the world, especially, but not only, in Europe. The global cloud services market is expected to reach $555 billion by 2020. [8] But those added services (exports in many cases) are at risk if it becomes too expensive to build data centers in the United States. While American firms could remain dominant for a while, cheaper inputs for foreign competitors will make them more competitive.

SIIA wrote in the May 11, 2018 letter about how the proposed tariffs on smart thermostats undermine U.S. leadership in the Internet of Things sector. We followed up with an article providing more detail.[9] The proposed HTS 8517.62.00 tariffs go even further in undermining U.S. competitiveness in that they cover "machines for the reception, conversion, and transmission, or regeneration of voice, images, or other data, including switching and routing apparatus." This is the keystone tariff line for Internet *connectivity*, as the products covered by this tariff line enable devices and other machines to connect with one another.

The construction of data centers is particularly affected by HTS 8517.62.00 because for the thousands of servers in a data center to connect with each other, and for the data center to connect with the outside world, US companies need to use optical transceivers, line cards, and other transmission devices to enable that connectivity.

The United States is a leader with respect to data centers. According to a 2017 list,[10] the United States has seven out of the world's top ten data centers. These U.S. data centers are located all over the United States and employ thousands of people. See below for where these U.S. data centers are located.

- The Citadel - Tahoe, Reno, Nevada
- Switch SuperNAP - Las Vegas, Nevada
- DFT Data Center - Ashburn, VA
- Utah Data Center - Bluffdale, Utah

[5] SIIA White Paper, "Guide to Policymakers on Cloud Computing," 2011
[6] Datamation, "Top 7 Cloud Computing Companies in 2018, Cynthia Harvey, May 18, 2018
[7] United States International Trade Commission, "Global Digital Trade I: Opportunities and Key Foreign Trade Restrictions," August 2017, page 73.
[8] Allied Market Research, "Cloud Services Market is Expected to Reach $555 Billion, Globally by 2020," August 2018
[9] "Tariffs Will Impede the Development of the Internet of Things (IOT) in the United States," Carl Schonander, SIIA Blog Page, May 15, 2018
[10] Data Center News, "Top 10 Largest Data Centers in the World," February 16, 2017

- Microsoft Data Center - West Des Moines, Iowa
- Lakeside Technology Center - Chicago, Illinois
- QTS Metro Data Center - Atlanta, Georgia

It is essential to remove the tariffs on HTS 8473.30.11 as well. Again, the products affected by the tariffs such as memory modules, graphical processing units (GPUs), and other printed circuit board assemblies (PCBAs) are crucial to data centers and cloud technologies in general. Should vital components needed for new data centers effectively be taxed through tariffs, it will become more affordable to construct new data centers outside the United States. In this context, it is worth noting that two of the top ten data centers are located in China. Making data centers more expensive to build in the United States makes the United States less competitive with respect to China. In fact, it will become essential if the United States wants to remain the world's preeminent cloud computing services provider and continue to dominate the data center market to continue to have access to competitively priced components and seamless supply chains.

In this context, it is worthwhile noting that in the United States the average data center adds $32.5 million[11] in economic activity to its local community each year. During construction, each data center adds $9.9 million in revenue for state and local governments, while employing an average of 1,688 workers.[12] For specific examples, Facebook's data center in Forest City, South Carolina, had a gross economic impact of $707 million across the state and supported 5,000 jobs within the span of two years.[13] Google's data centers support over 11,000 jobs throughout the United States, primarily in Georgia, Iowa, North Carolina, Oklahoma, Oregon, and South Carolina.[14] The growth of this industry depends upon the ability of U.S. tech firms to rapidly build U.S. data centers in new areas of the country so that small and large businesses can experience lower latency and faster, higher-quality performance.

Forcing US data center providers to reconfigure their supply chains and stop sourcing certain inputs from China would result in severe economic harm to US providers and jeopardize US leadership in the cloud market. In many cases, shifting production facilities could take a year and very often more time would be needed, giving foreign competitors an unearned opportunity to undercut and out-innovate US counterparts. This is because US providers have worked with specific manufacturing partners that have engaged in lengthy processes to build and qualify factories in certain locations, and have chosen specific vendors that can audit and validate the properties of server boards, networking equipment, and other key inputs. These are not fungible processes that can be shifted to a new location in a short period of time.

In addition to building and qualifying new factories, US providers would need to spend additional time to set up new transportation routes, negotiate pricing (and in some cases pay contractual penalties to manufacturing partners), and implement new logistics processes. These processes represent time lost to foreign competitors in the highly competitive and quickly growing market for cloud services.

Again, the most likely outcome of these tariffs is that companies that are currently doing final assembly of servers and other cloud infrastructure in the US would move those manufacturing facilities overseas to avoid the impact of tariffs. This would result in the loss of thousands of US jobs as well as the loss of

[11] U.S. Chamber Technology Engagement Center, "Data Centers – Jobs and Opportunities Nationwide," June 15, 2017
[12] U.S. Chamber Report
[13] RTI International, "Economic and Fiscal Impact Analysis: Facebook's Forest City Data Center," Executive Summary, August 2014, page 3
[14] https://static.googleusercontent.com/media/www.google.com/en//about/datacenters/usstory/full-report/full-report.pdf

valuable expertise and know-how that comes from homegrown manufacturing, assembly, and testing of cloud infrastructure. Ultimately, tariffs on parts covered by HTS 8473.30.11 would put U.S. cloud providers at a global disadvantage and harm many local businesses, manufacturers, and farmers that rely on U.S. data centers to store and access mission-critical data and workloads.

Proposed Tariffs will Impact Consumers Visibly, Including Possibly During the 2018 Christmas Season

On the consumer side, the impact is even more direct because the proposed duties would apply to a massive range of internet-connected consumer devices largely developed by US companies. If tariffs are imposed on this category, a recent study shows that they will increase costs for U.S. consumers by nearly $3.2 billion annually -- up to a 22% cost increase for each device.[15]

First, a consumer needs a modem and a router to connect to the Internet. Consumers and small businesses will see a direct increase in the costs of accessing the Internet if duties are imposed on these products.

Second, a consumer uses a wide range of Internet-connected devices to manage tasks, watch videos, play games, monitor their health, etc. Virtually all of these products (except for cell phones themselves) will be hit with increased costs if tariffs are imposed on HTS 8517.62.00.

Here are some examples of the types of products covered by HTS 8517.62.00 that consumers use to tap into the Internet, and that are potentially subject to 10-25% duties:

- bluetooth and other smart speakers
- e-readers
- gateways
- fitness trackers
- modems
- routers
- smart watches
- streaming devices for your TV
- wireless headphones

Virtually every American household that accesses the Internet at home or uses consumer tech will be directly impacted and will pay higher costs if the Administration imposes 10-25% additional duties on HTS 8517.62.00.

There will also be an Impact for U.S. Exporters of Consumer Goods

The impact, though, is not only on consumers. The innovators in these consumer tech categories are primarily US companies – companies like Apple, Google, Amazon, Microsoft, Cisco, Nest, Fitbit, and Sonos, among others. The US firms that make these products will become less competitive on a global basis as the additional duties give their foreign competitors a significant cost advantage over US goods in key export markets.

China's Trading Practices Need to Change and this Can be Achieved Together with Allies

[15] https://prod1.cta.tech/CTA/media/policyImages/Estimated-Impacts-of-Proposed-Tariffs-on-Imports-from-China_-Printed-Circuit-Assemblies-and-Wireless-Telecommunications-Accessories.pdf

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Again, SIIA very much appreciates the Administration's clear interest in changing the ground-rules for the U.S.-Chinese economic relationship. In this context, it is critical to determine what success would look like in negotiating with China and how to achieve that success.

Specifically, with respect to digital trade, China is one of the most restrictive markets. For example: U.S. firms ought to be able to provide cloud computing services in China, but Chinese policies block U.S. companies; it is also unacceptable that Chinese consumers cannot access 11 out of 25 of the world's most important consumer websites—roughly 3,000 websites cannot be accessed by Chinese consumers due to blocking by the Chinese government; voice-over-Internet Protocol services are restricted for no obvious reason; internet domain resources such as domain name registration procedures are subject to opaque rules that make it difficult for U.S. firms to provide services to businesses and consumers; the Cybersecurity law remains problematic because of the "secure and controllable" philosophy underpinning it; while "secure and controllable" policies were suspended for the banking sector, they remain a threat to the insurance and electronic commerce sectors; there are restrictions on online video and entertainment software that should be removed; intrusive encryption rules should be excised; there are no valid reasons why Internet-enabled payment services cannot be offered; intellectual property rights, in general, need to be enforced and respected; and data localization requirements should be removed.

Achieving the policy outcomes described above will not be easy. Our experience with respect to China's proposed "secure and controllable" cybersecurity rules tells us that success is possible if the U.S., EU, Japanese, South Korean, and other like-minded governments work together to address unfair Chinese trading practices. Such diplomatic coordination, coupled with international private sector coordination, produced results in 2016 with respect to proposed "secure and controllable" cybersecurity requirements in the banking sector. SIIA urges the U.S. government to intensify cooperation with allies to address Chinese commercial practices. Moreover, SIIA strongly supports the Trump Administration's decision to file a WTO case against Chinese licensing practices. While even favorable outcomes from WTO dispute resolution panels do not necessarily lead to the policy changes we seek, these cases are helpful in building the international support needed to modify Chinese behavior.

Once again, SIIA appreciates this opportunity to comment.

Sincerely,

Ken Wasch

Ken Wasch
President and CEO
Software & Information Industry Association

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May 11, 2018

Mr. Robert E. Lighthizer
United States Trade Representative
Office of the United States Trade Representative
White House

Dear Mr. Ambassador:

The Software & Information Industry Association (SIIA) appreciates the opportunity to submit comments on the U.S. government's proposed tariffs on certain Chinese products, which are contained in Docket No. USTR-20018-0005. It is certainly true that Chinese trade and commercial practices require sustained attention because there is no doubt that China does not provide for a level playing field for the kinds of technology and information companies that SIIA represents. SIIA therefore supports the Trump Administration's emphasis on changing the paradigm for U.S.-Chinese economic relations.

As a general matter, SIIA opposes tariffs as a means of changing other countries' practices because they are usually not effective, and because they impose costs on U.S. consumers and businesses. They are effectively a tax increase for individuals. This is why SIIA co-signed a March 18, 2018 multi trade association letter [16] to the President and a multi trade association April 11, 2018 letter [17] to the House of Representatives Ways and Means Committee explaining the general rationale for not imposing tariffs.

SIIA views on the proposed tariffs are furthermore informed by the immense potential the United States has in developing the Internet of Things (IOT), which we discuss in a White Paper entitled: "Empowering the Internet of Things: Benefits, Solutions, and Recommendations for Policymakers." [18] The paper includes information noting that the United States is the global leader with respect to IOT enabling factors. By 2030, IOT could enable annual 2.3% higher growth in the United States versus 1.3% in China. But this U.S. competitive advantage assumes in part seamless supply chains. Tariffs on important products such as automatic thermostats (HTS 9032.10.00) such as the key IOT product smart thermostats, undermine that ecosystem.

The SIIA IOT White Paper discusses efficiencies in the energy sector specifically. Smart thermostats are an important element in reducing energy use in homes and businesses, thus saving consumers and companies money, as well as reducing demand for energy. They have also become a major convenience for millions of U.S. consumers by allowing for remote control through smartphone apps and learning user temperature preferences. Statista estimates that the number of smart thermostats in the United States will rise from 17.5 million in the United States to 33 million in 2020. [19] Greentech Media estimates an

[16] Multi-Trade Association March 18, 2018 Letter to President Donald J. Trump.
[17] Multi-Trade Association April 11, 2018 Letter to House of Representatives Ways and Means Committee Chairman Kevin Brady and Ranking Member Richard Neal.
[18] SIIA White Paper: "Empowering the Internet of Things: Benefits, Solutions, and Recommendations for Policymakers," March 17, 2016.
[19] Statista Chart, 2018

even higher number of smart thermostat owners in the United States by 2020: 40 million U.S. households.[20] By placing an upward pressure on prices, the proposed tariffs will depress this demand , thus depriving some U.S. consumers of a product they clearly value and potentially reducing energy savings in the United States.

This is not a question of risking the loss of intellectual property to China. The real value-added to the smart thermostats manufactured in China is the research and development and software behind them. The R&D and software of US companies are largely developed in the United States by highly skilled workers and are not at risk based on the location of the thermostats' final manufacturing and assembly. In fact, the thermostats are often used in conjunction with apps that consumers download onto their phones. This software is not developed in China. The proposed tariffs risk dampening the thriving market for these products, which could negatively impact the growth of this key IOT market in which US companies have been leaders up to now.
From the standpoint of determining whether, pragmatically, the proposed tariffs have the potential to affect the Chinese government's policies, it is important to note that Chinese companies do not compete in the U.S. smart thermostat market in any significant way. In fact, the smart thermostat market is led by companies from the United States, the UK, Ireland, and Canada. These companies work with contract manufacturers to perform the final assembly in China. However, the contract manufacturers are not headquartered in China. What this means is that the tariffs will damage U.S. businesses and companies from U.S. allies while having very little impact on Chinese technology companies of the kind that the Chinese government wants to promote. This lessens the Chinese government's incentive to change policy in response to the proposed thermostat tariff. For these reasons, we request that USTR remove automatic thermostats (HTS 9032.10.00) from the list of products subject to the proposed additional tariffs.

Tariffs are generally harmful for the highly competitive U.S. technology sector. For example, U.S. firms lead in R&D funding for Augmented Reality and Virtual Reality. There are tariffs in these areas that increase the expense of conducting this research.[21] Other tariffs on components for data centers would likely also make it more expensive to build centers in the United States. As of 2017, seven of the world's top 10 data centers were located in the United States.[22] But this position cannot be taken for granted. It therefore remains important for U.S. data center owners to be able to source the cheapest and best components that are available. Maintaining the U.S. lead in data centers is likely a strategic, as well as economic, imperative.

Again though, SIIA very much appreciates the Administration's clear interest in changing the ground-rules for the U.S.-Chinese economic relationship. In this context, it is critical to determine what success would look like in negotiating with China and how to achieve that success.

Specifically, with respect to digital trade, China is one of the most restrictive markets: U.S. firms ought to be able to provide cloud computing services in China, but Chinese policies blocks U.S. companies; it is also unacceptable that Chinese consumers cannot access 11 out of 25 of the world's most important consumer websites—roughly 3,000 websites cannot be accessed by Chinese consumers due to blocking by the Chinese government; voice-over-Internet Protocol services are restricted for no obvious reason; internet

[20] Jeff St. John Article, "100 Million US Homes Lack Smart Devices, but 40 Million Will Have Smart Thermostats by 2020, Greentech Media, May 4, 2017
[21] 9031808085 - Other instruments, optical; 9031.80.8085 - Other optical device; 9031909195 - Parts of optical device; 7320.20.5020 - Steel Spring; 8479909440 - Parts of Industrial Robots; 7320205020 - Steel Helical Spring; 7320205060 - Steel Helical Spring; 8536694040 - Printed Circuit Connectors; 8541402000 – LEDs; 9013807000 - Flat Panel Display.
[22] Justin Mitchell Article, "Top 10 Largest Data Centers in the World," RackSolutions, February 16, 2017

domain resources such as domain name registration procedures are subject to opaque rules that make it difficult for U.S. firms to provide services to businesses and consumers; the Cybersecurity law remains problematic because of the "secure and controllable" philosophy underpinning it; while "secure and controllable" policies were suspended for the banking sector, they remain a threat to the insurance and electronic commerce sectors; there are restrictions on online video and entertainment software that should be removed; intrusive encryption rules should be excised; there are no valid reasons why Internet-enabled payment services cannot be offered; intellectual property rights, in general, need to be enforced and respected; and data localization requirements should be removed.

Achieving the policy outcomes described above will not be easy. Our experience with respect to China's proposed "secure and controllable" cybersecurity rules tells us that success is possible if the U.S., EU, Japanese, South Korean and other like-minded governments work together to address unfair Chinese trading practices. Such diplomatic coordination, coupled with international private sector coordination, produced results in 2016 with respect to proposed "secure and controllable" cybersecurity requirements in the banking sector. SIIA urges the U.S. government to intensify cooperation with allies to address Chinese commercial practices. Moreover, SIIA strongly supports the Trump Administration's decision to file a WTO case against Chinese licensing practices. While even favorable outcomes from WTO dispute resolution panels do not necessarily lead to the policy changes we seek, these cases are helpful in building the international support needed to modify Chinese behavior.

Once again, SIIA appreciates this opportunity to comment.

Sincerely,

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President and CEO
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